

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023925**Date Inspected:** 21-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspector: Mr. Sun Tian Liang

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

**OBG Trial Assembly**

This QA Inspector observed ZPMC welder Mr. Li Jian stencil 067829 used shielded metal arc welding procedure specification WPS-B-P-2214-FCM-1 to make segment 13BW weld LD3035-001-148. This QA Inspector observed a welding current of approximately 150 amps, the base material had been preheated with a torch and Mr. Li Jian appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wu Cunnang, stencil 070101 used flux cored welding procedure WPS-B-T-2132-ESAB to make OBG Segment 14W welds BP3090-001-018, 019, 026, 027. This QA Inspector observed a welding current of approximately of approximately 290 amps, 26.5 volts, the base material had been preheated with electric heaters and Mr. Wu Cunnang appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Mr. Huang Hongpei, stencil 037705 used flux cored welding procedure WPS-B-T-2213-ESAB to make OBG segment 13CW stiffener plate welds SEG3015B-195, 199, 203. This QA Inspector observed a welding current of approximately 230 amps, 26.0 volts, the base material had been preheated with electrical heaters and Mr. Huang Hongpei appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Jiang Yang Sheng, stencil 045240 used flux cored welding procedure WPS-B-T-2231-ESAB to make welds SA7514-003-008, 011. This QA Inspector observed a welding current of approximately 320 amps, 26.0 volts, the base material had been preheated with electric heaters and Mr. Jiang Yang Sheng appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Liao Yanfei, stencil 066398 used shielded metal arc welding procedure WPS-B-P-2212-TC-U4B-FCM-1 to make OBG segment 13BW weld SEG33014S-055 and WPS-B-P-2213-TC-U4B-FCM-1 to make segment 13AW weld SEG3013AH-004. This QA Inspector observed a welding current of approximately 175 amps, the base materials were heated with an electric heater and Mr. Liao Yanfei appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Liu Ya, stencil 067520 used shielded metal arc welding procedure specification WPS-B-P-2214-FCM-1 to make segment 13BW weld LD3034-001-148, 149, 124, 125. This QA Inspector observed a welding current of approximately 180 amps, the base materials appear to have been preheated with an electrical heater and Mr. Liu Ya appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Pan Ming, stencil 066673 used shielded metal arc welding procedure specification WPS-B-P-2113-B-U2-FCM-1 to make OBG segment 13AW weld DP3126-001-091, 011. This QA Inspector observed a welding current of approximately 150 amps, the base material had been preheated with electric heaters and Mr. Pan Ming appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Li Shoufu, stencil 066674 used shielded metal arc welding procedure WPS-B-P-2211-TC-U4B-FCM-1 to make OBG segment 13AW weld SEG3013AH-070. This QA Inspector observed a welding current of approximately 180 amps the base material had been preheated with electric heaters and Mr. Li Shoufu appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

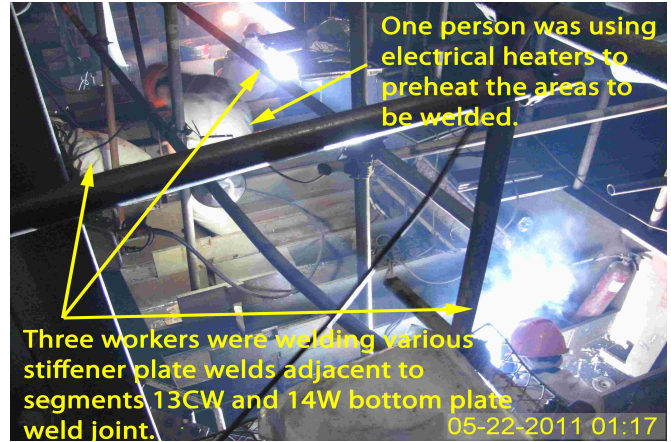
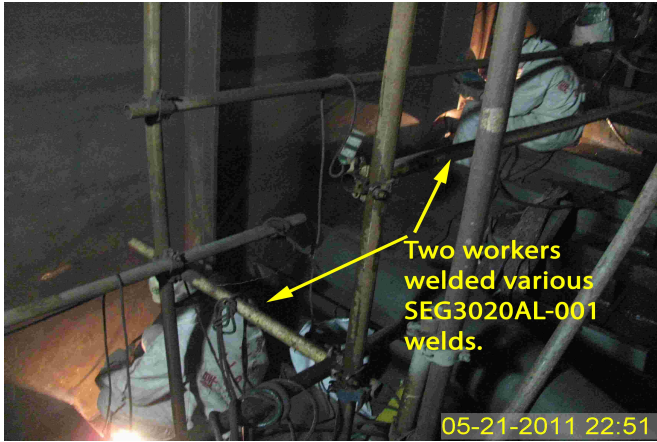
This QA Inspector observed ZPMC welder Mr. Jiang Junlin, stencil 067876 used flux cored welding procedure WPS-B-T-2213-ESAB to make OBG segment 13CW stiffener plate welds SEG3015B-062, 063. This QA Inspector observed a welding current of approximately 250 amps, 26.0 volts, the base material had been preheated with electrical heaters and Mr. Jiang Junlin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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### Summary of Conversations:

See Above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

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**Inspected By:** Dawson,Paul

Quality Assurance Inspector

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**Reviewed By:** Riley,Ken

QA Reviewer